

IN THE CLAIMS:

1. (Currently Amended) A system for providing exchange of messages and associated data across a plurality of communication network system entities for a plurality of communications networks, comprising:

at least one distributed message broker configured to operate in a services control layer and connectable to the plurality of communication network system entities of a plurality of communications networks, wherein the at least one message broker is configured to provide message processing between a plurality of system entities, wherein message processing includes at least one of: relaying and screening based on prioritization rules of at least one of customer classification, associated service classification, and system entity classification applied to a message classification of one or more messages communicated over the plurality of communications networks between the plurality of system entities; and

~~wherein, the at least one message broker provides for inter-message distributions across a plurality of communications domains.~~

an integrated service controller (ISC) connectable with the message broker;

wherein the ISC is configured to classify, register, integrate, operate, and prioritize a new service.

2. (Currently Amended) The system of claim 1 wherein the plurality of system entities includes at least one of: ~~a transport association controller (TAC), association state manager (ASM), other of the at least one message brokers, an integrated service controller (ISC)~~the ISC, a service logic entity, and service management entities.

3. (Original) The system of claim 1 wherein the message classification comprises at least one of: message type (request, information, instruction), associated event in message payload, and level of support of connection or connectionless oriented message transactions between system entities.

4. (Original) The system of claim 1 wherein the message broker is configured to relay the one or more messages to an appropriate destination based on at least one high-level name incorporated into the one or more messages.

5. (Original) The system of claim 1 wherein the message broker is configured to employ message delivery parameters which affect the manner of delivery for the one or more messages of a message classification between identified origination-destination endpoints.

6. (Original) The system of claim 5 wherein the message delivery parameters include at least one of: timers, queuing priority order, one or more levels of message delivery guarantees, ordering of sequential messages, integrity of message delivery, and message duplication handling.

7. (Original) The system of claim 6 wherein the message broker is configured to perform the message relay and screening prioritization of the one or more messages of a message classification based on static message operation prioritization rules.

8. (Original) The system of claim 7 wherein the static message operation prioritization rules comprise at least one of: security policies, resource allocation arbitration, reactivity to communication network conditions to ensure performance levels, and relationship definitions of associated messaging endpoints.

9. (Original) The system of claim 6 wherein the message broker is configured to perform dynamic prioritization for message relay and screening of the one or more messages of a

message classification through communication with the system entities from which the one or more messages is generated or received.

10. (Currently Amended) The system of claim 1 wherein the message broker is further configured to distribute messages ~~provide:~~

~~discovery which allows~~ including messages by which a serving system entity ~~to advertise~~ advertises capabilities and ~~messages by which~~ a client system entity ~~to identify and obtain~~ identifies and obtains one or more references to methods associated with the serving system entity; and

wherein the message broker is further configured to distribute messages between the serving system entity and the client system entity without an addressable reference. ~~transparency which enables both the serving and client system entities to communicate without requiring knowledge of an addressable reference for every one of the system entities in the plurality of communications networks.~~

11. (Original) The system of claim 1 wherein the at least one message broker is further configured to operate in a plurality of message distribution modes which include at least one of: unicast, multicast, and broadcast methods to support messaging requirements.

12-14. (Canceled)

15. (Currently Amended) The system of claim 1 wherein the at least one the message broker is configured to operate ~~in a services control layer~~ within the plurality of communications networks and is configured to relay or screen the one or more messages through the services control layer between at least one of: the plurality of system entities located in at least one service layer of at least one of the plurality of communications networks and the plurality of

system entities located in at least one transport control layer of the at least one of the plurality of communications networks.

16. (Currently Amended) The system of claim 15 wherein the at least one message broker is further configured to exchange the one or more messages with ~~the at least one~~ integrated service controller in the service control layer of the at least one of the plurality of communications networks.

17-19. (Canceled)

20. (Currently Amended) The system of claim ~~1~~ ~~49~~ wherein the at least one message broker is further configured to provide message translation for the one or messages communicated between the plurality of communications domains.

21. (Original) The system of claim 20 wherein the message translation includes message translation schemes which are modular and configurable from a provisioning management system.

22. (Currently Amended) The system of claim ~~1~~ ~~49~~ wherein the at least one message broker is further configured to provide for authentication and authorization for the one or more messages exchanged between the plurality of communications domains.

23. (Currently Amended) The system of claim ~~1~~ ~~49~~ wherein the at least one message broker is further configured to provide message tunneling for the one or more messages exchanged between the plurality of communications domains.

24. (Currently Amended) The system of claim ~~1~~ ~~49~~ wherein the at least one message broker is further configured to provide non-repudiation of message relay and screening in order to provide proof of message exchange transaction.

25. (Currently Amended) A method for providing exchange of messages and associated data across a plurality of communication network system entities for a plurality of communications networks, comprising the steps of:

configuring at least one message broker in a service control layer to establish connections with a plurality of communication network system entities of at least one communications networks;~~and~~

receiving and processing one or more messages from the system entities,—wherein the processing includes at least one of: relaying and screening based on prioritization rules of at least one of customer classification, associated service classification, and system entity classification applied to a message classification of one or more messages communicated over the at least one communications network between the plurality of system entities; and

~~wherein the at least one message broker provides for inter-message distributions across a plurality of communications domains.~~

configuring an integrated service controller (ISC) to classify, register, integrate, operate, and prioritize a new service.

26. (Currently Amended) The method of claim 25 wherein the plurality of system entities includes at least one of: ~~a transport association controller (TAC), association state manager (ASM), other of the at least one message brokers, an integrated service controller (ISC)~~ the ISC, a service logic entity, and service management entities.

27. (Original) The method of claim 25 wherein the message classification comprises at least one of: message type (request, information, instruction), associated event in message payload, and level of support of connection or connectionless oriented message transactions between system entities.

28. (Original) The method of claim 25 further comprising the step of relaying the one or more messages to an appropriate destination based on at least one high-level name incorporated into the one or more messages.

29. (Original) The method of claim 25 further comprising the step of employing message delivery parameters which affect the manner of delivery for the one or more messages of a message classification between identified origination-destination endpoints.

30. (Original) The method of claim 29 wherein the message delivery parameters include at least one of: timers, queuing priority order, one or more levels of message delivery guarantees, ordering of sequential messages, integrity of message delivery, and message duplication handling.

31. (Original) The method of claim 30 further comprising the step of performing the message relay and screening prioritization of the one or more messages of a message classification based on static message operation prioritization rules.

32. (Original) The method of claim 31 wherein the static message operation prioritization rules comprise at least one of: security policies, resource allocation arbitration, reactivity to communication network conditions to ensure performance levels, and relationship definitions of associated messaging endpoints.

33. (Original) The method of claim 30 further comprising the step of performing dynamic prioritization for message relay and screening of the one or more messages of a message classification through communication with the system entities from which the one or more messages is generated or received.

34. (Currently Amended) The method of claim 25 further comprising the steps ~~step~~ of:

~~distributing messages providing discovery~~ which ~~allow~~ allows a serving system entity to advertise capabilities and a client system entity to identify and obtain one or more references to methods associated with the serving system entity; and

~~distributing messages providing transparency~~ which ~~enable~~ enables both the serving and client system entities to communicate without requiring knowledge of an addressable reference for every one of the system entities in the plurality of communications networks.

35. (Original) The method of claim 25 further comprising the step of operating in a plurality of message distribution modes which include at least one of: unicast, multicast, and broadcast methods to support messaging requirements.

36-38. (Canceled)

39. (Currently Amended) The method of claim 25 wherein the at least one the message broker is configured to operate ~~in a services control layer~~ within the plurality of communications networks and is configured to relay or screen the one or more messages through the services control layer between at least one of: the plurality of system entities located in at least one service layer of at least one of the plurality of communications networks and the plurality of system entities located in at least one transport control layer of the at least one of the plurality of communications networks.

40. (Currently Amended) The method of claim 39 further comprising the step of exchanging the one or more messages with ~~the at least one~~ integrated service controller in the service control layer of the at least one of the plurality of communications networks.

41-43. (Canceled)

44. (Currently Amended) The method of claim ~~25~~ ~~43~~ further comprising the step of providing message translation for the one or messages communicated between the plurality of communications domains.

45. (Original) The method of claim 44 wherein the message translation comprises message translation schemes which are modular and configurable from a provisioning management system.

46. (Currently Amended) The method of claim ~~25~~ ~~39~~ wherein further comprising the step of providing authentication and authorization for the one or more messages exchanged between the plurality of communications domains.

47. (Currently Amended) The method of claim ~~25~~ ~~39~~ further comprising the step of providing message tunneling for the one or more messages exchanged between the plurality of communications domains.

48. (Currently Amended) The method of claim ~~25~~ ~~39~~ further comprising the step of providing non-repudiation of message relay and screening in order to provide proof of message exchange transaction.

49. (New) A system for providing dynamic service registration, integration, operation, and prioritization of services from a plurality of service providers across a plurality of communication networks, comprising:

a service control message broker (SCMB) configured in a service control layer, wherein the SCMB is in communication with a plurality of service providers and in communication a plurality of transport association controllers (TAC); and

an integrated service controller (ISC) configured in the service control layer in communication with the SCMB, wherein the ISC maintains an event registration list and a



message registration list relating to a plurality of services provided by a plurality of service providers.

50. (New) The system of claim 49, wherein the SCMB is implemented in a service control inter-working gateway.

51. (New) The system of claim 49, wherein the ISC is further configured to create a merged multi-service profile (MMSP) for a user.

52. (New) The system of claim 51, wherein the MMSP relates to services provided by the plurality of service providers.

53. (New) The system of claim 49, wherein at least two of the plurality of service providers are located on different networks.